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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---------------|----------------------|------------------------|------------------|
| 10/624,268 | 07/22/2003 | Mark J. Summer | 13879 | 7489 |
| 75 | 90 05/10/2005 | | EXAM | INER |
| PAUL F. DON | | | RAYFORD, | SANDRA M |
| ILLINOIS TOOL WORKS INC. 3600 WEST LAKE AVENUE | | | ART UNIT | PAPER NUMBER |
| GLENVIEW, IL 60025 | | | 1772 | |
| | | | DATE MAILED: 05/10/200 | • |

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

| Application No. | Applicant(s) | |
|-------------------------|-----------------|--|
| 10/624,268 | SUMMER, MARK J. | |
| Examiner | Art Unit | |
| Sandra M. Nolan-Rayford | 1772 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

| • | |
|---|--|
| 1) | Responsive to communication(s) filed on |
| 2a) <u></u> ☐ | This action is FINAL . 2b) This action is non-final. |
| 3) | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. |
| Dispositi | ion of Claims |
| 4)🛛 | Claim(s) <u>1-21</u> is/are pending in the application. |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. |
| 5)[| Claim(s) is/are allowed. |
| 6)⊠ | Claim(s) <u>1-21</u> is/are rejected. |
| 7)🖂 | Claim(s) <u>1-19</u> is/are objected to. |
| 8)□ | Claim(s) are subject to restriction and/or election requirement. |
| Applicati | ion Papers |
| 9)[] | The specification is objected to by the Examiner. |
| | The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. |
| , | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). |
| 11) | The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. |
| Priority ι | under 35 U.S.C. § 119 |
| 12) | Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). |
| a)[| ☐ All b) ☐ Some * c) ☐ None of: |
| | 1. Certified copies of the priority documents have been received. |
| | 2. Certified copies of the priority documents have been received in Application No |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage |
| | application from the International Bureau (PCT Rule 17.2(a)). |
| * S | See the attached detailed Office action for a list of the certified copies not received. |
| | |
| | |

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7-22-03.

| 4) 🔲 | Interview Summary (PTO-413) |
|------|-----------------------------|
| | Paper No(s)/Mail Date |

- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: ___

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

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DETAILED ACTION

Claims and Claim Interpretation

1. Claims 1-21 are pending.

Claims 1-19 are directed to rods and claims 20-21 are directed to methods of making rods via injection molding.

Note that:

- 1-a. The preambular phrase 'for a hydrometer of a storage battery" is deemed to relate to intended use and does not distinguish the claims from structures having the same features as those recited in the claims.
- 1-b. The method steps recited in claims 20-21 are deemed conventional operations in injection molding.

Drawing

The single drawing sheet submitted on 05 April 2004 has been entered.
It shows figures 1-4.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 22 July 2003 was considered by the examiner.

No Check of Assignment Records

4. At this writing, some features of the Office's PALM system are not operational.

Accordingly, the examiner has not been able to check the USPTO's records for any assignments associated with this application.

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Claim Objections

5. Claims 1-19 are objected to because of the following informalities: some claim terms do not adequately describe certain features recited in the claims. That is:

- A. The phrase "injection site" is indefinite.
- B. The phrase "tangent of the injection site" is indefinite.
- C. The phrase "the injection plane" is indefinite.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1-4 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Stiehl et al (US 5,350,367).

Stiehl teaches hypodermic syringe holders made of transparent [i.e., translucent] injection molded plastics (col. 5, lines 9-23), which contain rods **37** having fins **48** thereon (see Figure 4A and col. 4, lines 14-19). The fins are deemed to be inherently stress reducing because they are on the end of the rods that are inserted/injected into the other part(s) of the holders (see Figure 1).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 9. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 10. Claims 5-8 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stiehl.

Stiehl is discussed above. Note that the clamping element **14** has an opening with a particular shape (Figure 1).

It fails to teach all the features of the projections of these dependent claims.

In the absence of convincing objective evidence to the contrary, it would have been obvious to one having ordinary skill in the art at the time of the invention to employ fins having suitable shapes/angular relationships to the rods of Stiehl in order to attain proper alignment with the shape of the opening in the clamping element **14** (Figures 4A and 4B; col. 3, lines 51-56).

The motivation to employ fins having suitable shapes/angular relationships to the rods of Stiehl in order to attain proper alignment with the shape of the opening in the clamping element **14** is found in Figures 4A and 4B, where the fins and the clamping element are shown to be aligned.

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It is deemed desirable to make syringes that fit together well so that they can be used efficiently.

11. Claims 20-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stiehl, as discussed above.

Stiehl fails to teach all of the molding features recited in claims 20-21.

Note that the injection molded part of Stiehl's syringes are made using "precision injection molding techniques" (col. 5, lines 12-15).

In the absence of convincing objective evidence to the contrary, it would have been obvious to one having ordinary skill in the art at the time of the invention to employ suitably customized molds and molding techniques in making the rods of Stiehl.

The motivation to employ suitably customized molds and molding techniques in making the rods of Stiehl is found at col. 5, lines 12-15 of Stiehl, where it teaches that precision molding techniques can be used to make its syringe holders and the components thereof.

It is deemed beneficial to employ customized molding techniques in making injection molded articles, in order to insure that the articles have the shapes desired.

Conclusion

Any inquiry concerning this communication should be addressed to Sandra M. Nolan-Rayford, at telephone number 571/272-1495. She can be reached Monday through Thursday, from 6:30 am to 4:00 pm, ET.

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If attempts to reach the examiner are unsuccessful, contact her supervisor, Harold Pyon, at 571/272-1498.

The fax number for patent application documents is 703/872-9306.

S. M. Nolm-Rayford S. M. Nolan-Rayford Primary Examiner

Technology Center 1700

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